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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,878	01/17/2001	Takahiko Kawashima	826.1664	4982

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EXAMINER

ZURITA, JAMES H

ART UNIT PAPER NUMBER

3625

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/760,878

Applicant(s)

KAWASHIMA ET AL.

Examiner

James H. Zurita

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1,2 and 4-14 is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Prosecution History***

On 17 January 2001, applicant filed the instant application, claiming priority to application 200-176233, filed 13 June 2000 in Japan.

On 24 March 2004, the Examiner rejected claims 1-6 in a First Office Action.

On 26 July 2004, applicant filed a response, adding claims 7-14.

On 29 October 2004, the Examiner rejected claims 1-14 as unpatentable over Chang (US 6584459).

On 29 March 2005, applicant filed the present amendment, where he cancelled claim 3, amended claims 1, 4-14 and added claim 15.

On 17 June 2005, the Examiner rejected claims 1-2, 4-14 as unpatentable over Chang.

On 28 November 2005, Applicant requested reconsideration and submitted an amendment.

On 9 December 2005, the Examiner issued an Advisory Action.

On 28 December 2005, applicant requested continued examination.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 December 2005 has been entered.

***Response to Amendment***

On 28 December 2005, applicant amended claims 1, 6-8 and 11-12.

Claims 1-2 and 4-15 are pending. Claim 15 is withdrawn from consideration.

Claims 1-2 and 4-14 will be examined.

***Response to Arguments***

Applicant's arguments filed 28 December 2005 have been fully considered but they are not persuasive.

Objections to the drawings are withdrawn in view of amendment.

On page 8, lines 29-31, applicant argues that the phrase "transaction slip document" is not recited in any claim. The Examiner respectfully directs applicant's attention to the amendment of 28 December 2005, page 5, where claim 6 reads:

6. (CURRENTLY AMENDED) A computer-readable medium storing a program that causes a computer as an information apparatus to manage transaction slip data used in electronic commerce, by:  
extracting structure data as a search item of a transaction slip data document therefrom;  
storing the structure data extracted as management data in correlation with the transaction slip data;

Please see the limitation of "extracting ... of a *transaction slip data document* therefrom;" emphasis added.

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On page 8, line 32 to page 9, line 11 and page 10, lines 3-18, applicant argues that did not limit his invention to storing data in temporary storage. The Examiner's misunderstanding was based on remarks on Page 7, paragraph 6 of 29 March 2005:

Applicants respectfully point out to the Examiner that features of "a data extracting unit," "a storing unit," and "a transaction slip data extracting unit" are shown for example in FIG. 3, and that a "transmitting unit", "receiving unit", and "converting unit" are shown in FIGs. 7, 8, and 16. For example, FIG. 16 shows a RAM 1504 and a ROM 1503 that are storing units, and an information provider 1507, communications interface 1505, and network 1506 as transmitting unit and receiving unit.

On page 9, lines 12-21, applicant quotes paragraph [0062] as reading:

Applicants point out that paragraph [0062] of the specification describes FIG. 16 as illustrating:

(a) CPU 1502 is connected to a ROM 1503, a RAM 1504, a communication interface 1505, a recording device 1508, a record medium reading device 1509, and an inputting/outputting device 1511. Management data, transaction slip data, conversion table, transfer destination table, and so forth are stored to the recording device 1508 such as a hard disk.

(Emphasis added).

That is, a permanent storage hard disk is illustrated in FIG. 16 as recording device 1508. Withdrawal of the objection to the drawings is requested.

However, the Examiner notes that the amendment of 28 December 2005 to the specification, page 2, bottom paragraph reads:


Please amend paragraph [0062], in accordance with the following:

A CPU 1502 is connected to a ROM 1503, a RAM 1504, a communication interface 1505, a receiving unit 1599, a recording device 1508, a record medium reading device 1509, and an inputting/outputting device 1511. Management data, transaction slip data, conversion table, transfer destination table, and so forth are stored to the recording device 1508 such as a hard disk or a portable record medium 1510 such as a CD-ROM, a DVD, or a floppy disk. Data recorded on the portable record medium 1510 is read by the CPU 1502 through the record medium reading device 1509.

On page 9, lines 22-32, and page 10, lines 19-34, Applicant argues that he has amended paragraph [0060] to overcome rejections under 35 USC 112. The Examiner notes that the rejection under 35 USC 112 is directed to claims 8 and 12, which still refer to changing the structure data, that is, an XML DTD (Data Type Definition). The :

8. (CURRENTLY AMENDED) The method according to claim 7, further comprising changing the structure information data of a document to be considered including the management data.

The original rejection, page 6 of the Office Action of 28 June 2005 is copied below for applicant's convenience:

 Claims 8 and 12 refer to "...changing structure information of a document including the management data..." Applicant changed claims 8 and 12 from "...changing structure information of a management data document." Applicant still does not disclose changing *structure information* (e.g., Fig. 10, Fig. 15). Please note that structure information is found in a Data Type Definition (DTD). A DTD is a separate document that contains formal definitions of all of the data elements in a particular type of HTML, SGML or XML document.<sup>2</sup> See for example, references to management data document structure information 8, 9, in paragraph 42. Applicant does not disclose how to change a DTD.

For page 9, line 33-page 10, line 2 arguments, objections to claims 1, 6, 7, 11 and 15 are withdrawn in view of amendment.

On page 11, lines 11-33, applicant argues that the rejection over Chang should be withdrawn:

Applicants submit that prima facie obviousness is not established since Chang does not teach recited features by each of the independent claims including, using claim 1, as amended, as an example, "extracting structure data as a search item of the document including transaction slip data therefrom; (and) storing the structure data extracted by said

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data extracting unit as management data that is correlated with the transaction slip data. (emphasis added)."

Chang also does not teach a converting so a "first format of the received transaction slip data is useable by an order issuer and the second format based on a transmission destination is useable by an order acceptor in an electronic business transaction between the order issuer and the order acceptor without requiring a tailoring of servers of the order issuer and the order acceptor (emphasis added)."

Chang merely teaches (see, for example, col. 7, starting at line 45) a converting of "UDFs 144 convert XML files into a storage format with predefined attribute values, storing XML documents internally within the DB2.RTM."

That is, Chang merely teaches taking out data contained in an XML document, and converting the data into that of a database-storage format and conducting a search of the data thus taken out.

As applicant admits, Chang extracts data that is embedded in an XML document, storing the data, and providing search capabilities for the extracted data. The Examiner also respectfully directs applicant's attention to the remainder of the cited text, copied here for applicant's convenience. The portion quoted by applicant is in bold.

(14) The ADT 142 is a relational facility introduced by DB2.RTM. version 6 allowing the user to define new and distinct data types and subtypes to a database engine. Subsequently, the database engine ensures that an application uses data of a specific data type only when the user requires and expects such an action. In order to provide the flexibility of user defined types and subtypes, the XML extender 100 creates an ADT 142 called DB2XML for storing and retrieving XML documents. The DB2XML ADT 142 is a structured data type with its own attributes, which are used to store data and metadata of XML documents. With the DB2.RTM. version 6 ADT feature, a set of methods called accessor methods is automatically generated when DB2XML ADT 142 is created. The implementation of the ADT 142 will be discussed below within the overall operation of the XML extender 100.

(15) The UDFs 144 are built-in relational facilities introduced by DB2.RTM. version 6 allowing the user to define new functions for storage, search, and retrieval of XML documents. Through the signature of its parameter list, a UDF 144 may be associated with a standard data type, such as the DB2XML ADT 142. The **UDFs 144 convert XML files into a storage format with predefined attribute values, storing XML documents internally within the DB2.RTM. database** 300 or externally within the file system 500. After integrating XML documents into the database system, the UDFs 144 may be included in SQL statements to describe properties of XML documents via DB2XML attribute values, to search for element content or XML attribute values by specifying the structural path, or to search for XML documents by a structural search on both path and content. The implementation of the UDFs 144 will be discussed below within the overall operation of the XML extender 100.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 4-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is presented for purposes of clarifying the record.

The specifications appear to be a literal translation from a foreign document. It is difficult to correlate the limitations of the claims with the specification and drawings.

For purposes of examination, the claims will be interpreted as described below.

Claims 1-4, 4-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.



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The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. The claimed steps do not correspond to the description of applicant's invention, and it is difficult to determine the meets and bounds of the claims.

For purposes of examination, as best understood by the Examiner from reading the disclosures, the claims will be interpreted to require:

- Receiving, at a central location, an input record (from a buyer, for example) that has a header portion and a "record" (i.e., detail) portion (Fig. 2). Each portion has data that is embedded in XML tags that define the structure of an XML DTD.
  - For each input record,
    - Extracting the embedded data from the header portion, storing it as "management" data;
    - Extracting the embedded data from the record portion and storing it as "transaction" data;
    - Correlating the management data and transaction data with a common identifier.
- Searching stored management data for particular contents (e.g., for company P, a buyer, as in Fig. 9)
  - For each record retrieved in the search of management data,
    - Obtaining the related transaction data via the common identifier.
    - Formatting the related transaction data into a format compatible with an intended recipient (e.g., a particular seller) according to conversion parameters.

The Examiner believes that the applicant intends that the extracted embedded data excludes structure data, such as XML tags, metadata, etc., as in Fig. 6.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2 and 4-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (US 6584459).

Chang discloses an EDI/XML environment that manages documents containing transaction data (applicant's transaction slip data documents) in electronic commerce, with database devices.

***As per claims 1, 6, 7 and 11, Chang discloses:***

- ***extracting*** structure data as a search item of the transaction slip data document therefrom. See, for example, at least Col. 20, lines 1-50.
- ***storing*** the structure data extracted as management data in correlation with the transaction data; see, for example, at least Col. 20, line 55-Col. 21, line 15.
- ***searching*** the management data so as to extract correlated transaction slip data. See at least Col. 7, lines 45-67, Col. 21, line 16-Col. 22, line 40, Col. 23, line 52-Col. 25, line 60.
- ***transmitting*** the transaction slip data extracted [in the search step] over a network. See at least sending results to interfaces, at least Col. 5, line 12-Col. 6, line 45.
- ***receiving*** the transmitted slip data. See, for example, at least Figs. 1, 2 and related text, and references to various units that receive transmitted detail data.
- ***converting*** a first format of the received transaction slip data into a second format based on a transmission destination, wherein
  - the first format of the received transaction slip data is usable by an order issuer (buyer) and the second format based on a transmission destination is usable by an order acceptor (seller) in an electronic business transaction between the order issuer and order acceptor without requiring a tailoring of servers of the order issuer and the order acceptor. See, for example, Fig. 2,

DB2 XML extender, which converts data to and from formats used by other systems and parties.

**As per claim 2**, Chang discloses that correlation between data is managed with a key that is common. See, for example, at least references to DocId, Index, Key, RID, at least Fig. 4, 6, 12-13 and related text. See also at least Col. 19, line 1- Col. 20, line 50. See also references to primary keys, foreign keys, DTDId, and other keys that correlate data among the various data objects, at least Col. 13, line 1-Col. 15, line 48.

**As per claim 4** Chang discloses that users are allowed to define new searches for retrieval of XML documents. See, for example, at least Col. 6, lines 19-45.

**As per claim 5**, Chang discloses

- that the document containing transaction data is an XML document. See, for example, at least Col. 2, line 18-Col. 3, line 24, Col. 3, line 47-Col. 4, line 18, Figs. 3, 8, 9 and related text.
- that users are allowed to define new searches for retrieval of XML documents. See, for example, at least Col. 6, lines 38-45, Col. 7, line 54-Col. 8, line 3. As per claims 5, 10 and 14, a user may alter targets of a search by changing a search query according to particular tags found in XML documents, such as an author tag in XML document of Col. 5 that is used as a search parameter in the query found in Col. 20.

**Claim 6** is rejected on the same grounds as claim 1.

**Claim 7** is rejected on the same grounds as claim 1.

**As per Claim 8**, Chang discloses changing the structure data of a document to be considered including the management data. Chang discloses that users may define new searches by changing search parameters such as management data. See, for example, at least Col. 6, lines 38-45, Col. 7, line 54-Col. 8, line 3.

**Claim 9** is rejected on the same grounds as claim 5.

**Claim 10** is rejected on the same grounds as claim 5.

**Claim 11** is rejected on the same grounds as claim 1.

**Claim 12** is rejected on the same grounds as claim 8.

**Claim 13** is rejected on the same grounds as claim 5.

**Claim 14** is rejected on the same grounds as claim 5.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Zurita whose telephone number is 571-272-6766. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pond can be reached on 571-272-6760. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**James Zurita**  
**Patent Examiner**  
**Art Unit 3625**  
17 March 2006

*James Zurita*  
*Patent Examiner*  
*Art 3625*